

# **APPENDIX I: CONSTRUCTIVE REDUCTION TO PRACTICE<sup>2</sup>**

New Claim	Support in the Present Application (09/589,288)
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;">MDDSTEREQS RLTSCLKKRE EMKLKECVSI LPRKESPSVR SSKDGKLLAA TLLLALLSCC LTVVSFYQVA ALQGDLASLR AELQGHHAEK LPAGAGAPKA GLEEAPAVTA GLKIFEPPAP GEGNSSQNSR NKRAVQGPEE TVTQDCLQLI ADSETPTIQK GSYTFVPWLL SFKRGSAL EE KENKILVKET GYFFIYGQVL YTDKTYAMGH LIQRKKVHVF GDELSLVTLF RCIQNMPETL PNNSCYSAGI AKLEEGDELQ LAIPRENAQI SLDGDVTFFG ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-<math>\alpha</math> exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-<math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.” <i>p. 83:7-10</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math>-mediated and/or Neutrokin-<math>\alpha</math>SV-mediated chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” <i>p. 331:15-19</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV antagonist. Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.” <i>p. 24:10-15</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention have uses that include, but are not limited to, to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV function.” <i>p. 223:17-22</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.” <i>p. 24:14-15. See also p. 429:13 - p. 433:2</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or</p>

<sup>2</sup> These tables present exemplary support in the present application and in each of the priority cases to the present application to demonstrate that each application contains a constructive reduction to practice of the invention of the proposed count. Applicants reserve the right to supplement these tables as may be required.

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	<p>Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 366:12-15</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-<math>\alpha</math>.”  <i>p. 24:19-20</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 114:13-15</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 376:23-25</i></p> <p>“In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, “Monoclonal Antibody Technology,” In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984)).”  <i>p. 377:3-10</i></p>
<p>199. The method of any one of claims 195-197,</p>	<p><i>See support for Claim 195 and in addition the following</i></p>

New Claim	Support in the Present Application (09/589,288)
wherein the antibody is recombinantly produced.	<p><i>disclosure:</i></p> <p><b>“Methods of Producing Antibodies</b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques.”</p> <p><i>p. 243:21-24</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985).”</p> <p><i>p. 307:7-16</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”</p> <p><i>p. 376:23-25</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not</p>

New Claim	Support in the Present Application (09/589,288)
	limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen." <i>p. 234:15-19</i>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described herein." <i>p. 331:13-14</i>  "The agonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter." <i>p. 338:18-19</i>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV polypeptide on cells, such as its interaction with Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV or which functions in a manner similar to Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV while antagonists decrease or eliminate such functions." <i>p. 366:9-15</i>  "An <i>in vitro</i> cell proliferation, cytotoxicity, cell survival, and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation and/or survival modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases." <i>p. 82:4-15</i>

New Claim	Support in 09/507,968
195. A method of inhibiting B lymphocytes comprising administering an effective amount of an	"Like other members of TNF family, Neutrokin- $\alpha$ exhibits activity on leukocytes including, for example,

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<p>antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSALEE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.”  <i>p.67:1-4.</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha-mediated and/or Neutrokin-alphaSV-mediated chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 269:28-32</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 20:1-6</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention have uses that include, but are not limited to, to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 181:31 - p. 182:3</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin alpha specific and/or Neutrokin alphaSV specific antibodies.”  <i>p. 20:5-6. See also p. 350:15 - p. 353:13</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 298:19-22</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”</p>

New Claim	Support in 09/507,968
	<i>p. 20:10-11</i>
196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin- $\alpha$ (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	<i>See support for Claim 195</i>
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin- $\alpha$ (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	<i>See support for Claim 195</i>
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 92:21-23</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 307:6-8</i></p> <p>“In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, “Monoclonal Antibody Technology,” In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984)).”  <i>p. 307:12-19</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p><b>“Methods of Producing Antibodies</b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques.”</p>

New Claim	Support in 09/507,968
	<i>p. 198:13-16</i>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p><i>p. 250:3-12</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p><i>p. 307:6-8</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen."</p> <p><i>p. 190:29-33</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>

New Claim	Support in 09/507,968
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described herein.” p. 269:26-27</p> <p>“The agonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.” p. 275:23-24</p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide on cells, such as its interaction with Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.” p. 298:16-22</p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity, cell survival, and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation and/or survival modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases.” p. 66:3-14</p>

New Claim	Support in 60/176,015
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE EMKLKECVSI LPRKESPSVR SSKDGKLLAA TLLLALLSCC LTVVSFYQVA ALQGDLASLR AELQGHHA EK LPAGAGAPKA GLEEAPAVTA GLKIFEPPAP</p>	<p>“Like other members of TNF family, Neutrokin-<math>\alpha</math> exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-<math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.” p. 61:16-19</p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math>-mediated and/or Neutrokin-<math>\alpha</math>SV-mediated chemotaxis and</p>



New Claim	Support in 60/176,015
<p> GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 275:9-13</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 16:3-8</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 177:14-19</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 16:7-8. See also p. 356:5 - p. 359:6</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 301:7-10</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 16:12-13</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective</p>	<p><i>See support for Claim 195</i></p>

New Claim	Support in 60/176,015
amount of an antibody that binds Neurokine-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention."  <i>p. 86:11-13</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  <i>p. 309:32 - p. 310:2</i></p> <p>"In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, "Monoclonal Antibody Technology," In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984))."  <i>p. 310:6-13</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p><b><i>"Methods of Producing Antibodies</i></b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques."  <i>p. 194:5-8</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neurokine-alpha and/or Neurokine-alphaSV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be</p>

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	<p>produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p>p. 253:27 - p. 254:4</p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p>p. 309:32 - p. 310:2</p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen."</p> <p>p. 186:15-19</p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."</p> <p>p. 275:7-8</p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically</p>

New Claim	Support in 60/176,015
	acceptable carrier, e.g., as described hereinafter.” p. 276:23-25
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.” p. 301:4-10</p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases.” p. 60:14-25</p>

New Claim	Support in 60/171,626
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPE TL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.” p. 59:31 - p. 60:1</p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha-mediated and/or Neutrokin-alphaSV-mediated chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” p. 263:18-22</p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or</p>

New Claim	Support in 60/171,626
<p>wherein B lymphocytes are inhibited.</p>	<p>Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 15:24-29</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 172:8-13</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 15:28-29. See also p. 342:5 - p. 345:2</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 288:14-17</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 16:1-2</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically</p>

New Claim	Support in 60/171,626
	<p>to a polypeptide of the invention.”  <i>p. 83:30-32</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 296:30-32</i></p> <p>“In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, "Monoclonal Antibody Technology," In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984)).”  <i>p. 297:3-10</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p><b>“Methods of Producing Antibodies</b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques.”  <i>p. 188:16-19</i></p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985).”</p>

New Claim	Support in 60/171,626
	<i>p. 242:18-27</i>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”</p> <p><i>p. 296:30-32</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen.”</p> <p><i>p. 181:2-6</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”</p> <p><i>p. 263:16-17</i></p> <p>“The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.”</p> <p><i>p. 264:31-33</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV</p>

New Claim	Support in 60/171,626
	<p>polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.” p. 288:11-17</p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases.” p. 58:30 - p. 59:8</p>

New Claim	Support in 60/171,108
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELO  LAIPRENAQI SLDGDVTFFG  ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.” p. 72:12-15</p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha-mediated and/or Neutrokin-alphaSV-mediated chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” p. 320:1-5</p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.” p. 19:3-8</p>



New Claim	Support in 60/171,108
	<p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 209:14-19</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 19:7-8. See also p. 415:15 - p. 419:6</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 350:12-15</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 19:12-13</i></p>
196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	<i>See support for Claim 195</i>
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	<i>See support for Claim 195</i>
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 101:19-21</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab’) fragments) which are capable of binding an antigen.”</p>

New Claim	Support in 60/171,108
	<p>p. 360:23-25</p> <p>"In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, "Monoclonal Antibody Technology," In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984))."</p> <p>p. 361:3-10</p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p>See support for Claim 195 and in addition the following disclosure:</p> <p><b>"Methods of Producing Antibodies</b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques."</p> <p>p. 228:22-25</p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p>See support for Claim 195 and in addition the following disclosure:</p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p>p. 294:9-18</p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p>See support for Claims 195 and 200</p>
<p>202. The method of any one of claims 195-197, wherein the antibody comprises human constant</p>	<p>See support for Claims 195 and 200</p>

New Claim	Support in 60/171,108
domains.	
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  p. 360:23-25</p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen."  p. 219:18-22</p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<p><i>See support for Claims 195 and 203</i></p>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."  p. 319:26-27</p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter."  p. 321:20-22</p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions."</p>

New Claim	Support in 60/171,108
	<p><i>p. 350:9-15</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases.”</p> <p><i>p. 71:5-16</i></p>

New Claim	Support in 60/168,624
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;"> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.”</p> <p><i>p. 62:20-23</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha-mediated and/or Neutrokin-alphaSV-mediated chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”</p> <p><i>p. 215:28-32</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”</p> <p><i>p. 16:4-9</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”</p>

New Claim	Support in 60/168,624
	<p><i>p. 126:30 – p. 127:3</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 16:8-9. See also p. 294:1 – p. 297:2</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 239:5-8</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-<math>\alpha</math>.”  <i>p. 16:13-14</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 87:14-16</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 247:30-32</i></p> <p>“In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and</i></p>

New Claim	Support in 60/168,624
	<p><i>Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, "Monoclonal Antibody Technology," In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984))."</p> <p>p. 248:4-11</p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p>See support for Claim 195 and in addition the following disclosure:</p> <p><b><u>"Methods of Producing Antibodies</u></b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques."</p> <p>p. 147:19-22</p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p>See support for Claim 195 and in addition the following disclosure:</p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p>p. 195:20-29</p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p>See support for Claims 195 and 200</p>
<p>202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.</p>	<p>See support for Claims 195 and 200</p>
<p>203. The method of any one of claims 195-197, wherein the antibody is a F(ab')<sub>2</sub> fragment.</p>	<p>See support for Claim 195 and in addition the following disclosure:</p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p>

New Claim	Support in 60/168,624
	<i>p. 247:30-32</i>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen.”</p> <p><i>p. 139:27-31</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”</p> <p><i>p. 215:26-27</i></p> <p>“The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.”</p> <p><i>p. 217:10-12</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”</p> <p><i>p. 239:2-8</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and</p>

<b>New Claim</b>	<b>Support in 60/168,624</b>
	other immune-related diseases.” <i>p. 61:18-29</i>

<b>New Claim</b>	<b>Support in 60/167,239</b>
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;"> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-<math>\alpha</math> exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-<math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.” <i>p. 59:29-32</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math>-mediated and/or Neutrokin-<math>\alpha</math>SV-mediated chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” <i>p. 208:13-17</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV antagonist. Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.” <i>p. 15:22-27</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV function.” <i>p. 122:10-15</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.” <i>p. 15:26-27. See also p. 284:13 – p. 287:11</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner</p>



New Claim	Support in 60/167,239
	<p>similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 231:4-7</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-<math>\alpha</math>.”  <i>p. 15:31-32</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 83:30-32</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 239:23-25</i></p> <p>“In a preferred method, antibodies according to the present invention are mAbs. Such mAbs can be prepared using hybridoma technology (Kohler and Millstein, <i>Nature</i> 256:495-497 (1975) and U.S. Patent No. 4,376,110; Harlow et al., <i>Antibodies: A Laboratory Manual</i>, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1988; <i>Monoclonal Antibodies and Hybridomas: A New Dimension in Biological Analyses</i>, Plenum Press, New York, NY, 1980; Campbell, “Monoclonal Antibody Technology,” In: <i>Laboratory Techniques in Biochemistry and Molecular Biology</i>, Volume 13 (Burdon et al., eds.), Elsevier, Amsterdam (1984)).”  <i>p. 239:29 – p. 240:3</i></p>
<p>199. The method of any one of claims 195-197,</p>	<p><i>See support for Claim 195 and in addition the following</i></p>

New Claim	Support in 60/167,239
wherein the antibody is recombinantly produced.	<p><i>disclosure:</i></p> <p><b><u>"Methods of Producing Antibodies</u></b></p> <p>The antibodies of the invention can be produced by any method known in the art for the synthesis of antibodies, in particular, by chemical synthesis or preferably, by recombinant expression techniques."</p> <p><i>p. 142:10-13</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p><i>p. 188:26 – p. 189:2</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p><i>p. 239:23-25</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Polyclonal antibodies to an antigen-of-interest can be produced by various procedures well known in the art. For example, a polypeptide of the invention can be administered to various host animals including, but not</p>

New Claim	Support in 60/167,239
	limited to, rabbits, mice, rats, etc. to induce the production of sera containing polyclonal antibodies specific for the antigen." <i>p. 134:27-31</i>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above." <i>p. 208:11-12</i>  "The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter." <i>p. 209:26-28</i>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions." <i>p. 231:1-7</i>  "An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death.... Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases." <i>p. 58:28 – p. 59:6</i>

New Claim	Support in 60/145,824
195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid	"Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils.

New Claim	Support in 60/145,824
<p>sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.”  <i>p. 56:25-28</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha and/or Neutrokin-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 162:18-22</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 16:4-9</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 116:21-26</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 16:8-9</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 178:28-31</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 16:13-14</i></p>

New Claim	Support in 60/145,824
196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin- $\alpha$ (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	<i>See support for Claim 195</i>
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin- $\alpha$ (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	<i>See support for Claim 195</i>
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention."  <i>p. 76:15-17</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  <i>p. 187:24-26</i></p> <p>"In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 )."  <i>p. 123:11-17</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology"  <i>p. 124:21-22</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be</p>

New Claim	Support in 60/145,824
	<p>preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p><i>p. 145:32 – p. 146:9</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p><i>p. 187:24-26</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neurokine-alpha and/or Neurokine-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies."</p> <p><i>p. 123:4-6</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."</p> <p><i>p. 162:16-17</i></p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically</p>

New Claim	Support in 60/145,824
	acceptable carrier, e.g., as described hereinafter.” p. 163:26-28
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.” p. 178:25-31</p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases, inflammation and other immune-related diseases.” p. 55:22 – p. 56:2</p>

New Claim	Support in 60/142,659
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.” p. 56:25-28</p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha and/or Neutrokin-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” p. 160:28-32</p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or</p>

New Claim	Support in 60/142,659
<p>wherein B lymphocytes are inhibited.</p>	<p>Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 16:4-9</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 116:21-26</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 16:8-9</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 176:23-26</i></p> <p>“Figures 1A and 1B shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 16:13-14</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically</p>



New Claim	Support in 60/142,659
	<p>to a polypeptide of the invention.”  <i>p. 76:15-17</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 185:15-17</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 123:11-17</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology”  <i>p. 124:21-22</i></p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use human antibodies or "humanized" chimeric monoclonal antibodies. Such antibodies can be produced using techniques described herein or otherwise known in the art. For example methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”  <i>p. 145:32 – p. 146:9</i></p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p><i>See support for Claims 195 and 200</i></p>

New Claim	Support in 60/142,659
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  <i>p. 185:15-17</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies."  <i>p. 123:4-6</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."  <i>p. 160:26-27</i></p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter."  <i>p. 162:5-7</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions."</p>

New Claim	Support in 60/142,659
	<p><i>p. 176:20-26</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”</p> <p><i>p. 55:22 - p. 56:2</i></p>

New Claim	Support in 60/136,784
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;"> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSALEE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.”</p> <p><i>p. 47:27-30</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha and/or Neutrokin-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”</p> <p><i>p. 121:25-29</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”</p> <p><i>p 13:15-20</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”</p>

New Claim	Support in 60/136,784
	<p><i>p. 95:18-23</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”</p> <p><i>p. 13:19-20</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”</p> <p><i>p. 131:15-18</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”</p> <p><i>p. 13:24-25</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”</p> <p><i>p. 62:37 – p. 63:2</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”</p> <p><i>p. 138:24-26</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et</i></p>

New Claim	Support in 60/136,784
	al., Eur. J. Immunol. 6:292 (1976); Hammerling et al., in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i> , Elsevier, N.Y., (1981) pp. 563-681 ).” p. 100:28-34
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<i>See support for Claim 195 and in addition the following disclosure:</i>  “Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology” p. 101:30-31
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>  “Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985).” p. 116:20-29
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<i>See support for Claim 195 and in addition the following disclosure:</i>  “The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.” p. 138:24-26
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>  “...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing

New Claim	Support in 60/136,784
	polyclonal antibodies.” <i>p. 100:21-23</i>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<i>See support for Claim 195 and in addition the following disclosure:</i>  “The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.” <i>p. 121:23-24</i>  “The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.” <i>p. 122:25-27</i>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<i>See support for Claim 195 and in addition the following disclosure:</i>  “The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV polypeptide on cells, such as its interaction with Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV or which functions in a manner similar to Neutrokin- $\alpha$ and/or Neutrokin- $\alpha$ SV while antagonists decrease or eliminate such functions.” <i>p. 131:12-18</i>  “An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.” <i>p. 46:32 – p. 47:5</i>

New Claim	Support in 60/131,673
195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:	“Like other members of TNF family, Neutrokin- $\alpha$ exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin- $\alpha$ is active in directing the proliferation, differentiation and migration of these

New Claim	Support in 60/131,673
<p> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>cell types.”  <i>p. 47:27-30</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 117:15-19</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV antagonist. Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 13:9-14</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV function.”  <i>p. 92:20-25</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 13:13-14</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 127:5-8</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-<math>\alpha</math>.”  <i>p. 13:18-19</i></p>
196. A method of inhibiting B lymphocyte proliferation comprising administering an effective	<i>See support for Claim 195</i>

New Claim	Support in 60/131,673
amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	<i>See support for Claim 195</i>
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention."  <i>p. 62:29-32</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  <i>p. 134:13-15</i></p> <p>"In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 )."  <i>p. 97:30-36</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology"  <i>p. 98:32-33</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies</p>



New Claim	Support in 60/131,673
	are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)." <i>p. 112:18-27</i>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen." <i>p. 134:13-15</i>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies." <i>p. 97:23-25</i>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above." <i>p. 117:13-14</i>  "The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter." <i>p. 118:15-17</i>
207. The method of any one of claims 195-197,	<i>See support for Claim 195 and in addition the following</i>

New Claim	Support in 60/131,673
<p>wherein the antibody is administered to a cell culture.</p>	<p><i>disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide on cells, such as its interaction with Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 127:2-8</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”  <i>p. 46:32 – p. 47:5</i></p>

New Claim	Support in 60/131,278
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-<math>\alpha</math> exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-<math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.”  <i>p. 47:27-30</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 117:15-19</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV</p>

New Claim	Support in 60/131,278
	<p>antagonist. Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 13:9-14</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV function.”  <i>p. 92:20-25</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 13:13-14</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 127:5-8</i></p> <p>“Figures 1A and 1B shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-<math>\alpha</math>.”  <i>p. 13:18-19</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 62:29-32</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody”</p>

New Claim	Support in 60/131,278
	<p>(mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 134:13-15</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokine-alpha and/or Neutrokine-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 97:30-36</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology”  <i>p. 98:32-33</i></p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokine-alpha and/or Neutrokine-alphaSV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”  <i>p. 112:17-26</i></p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p><i>See support for Claims 195 and 200</i></p>
<p>202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.</p>	<p><i>See support for Claims 195 and 200</i></p>
<p>203. The method of any one of claims 195-197, wherein the antibody is a F(ab')<sub>2</sub> fragment.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody"</p>

New Claim	Support in 60/131,278
	(mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen." <i>p. 134:13-15</i>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies." <i>p. 97:23-25</i>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above." <i>p. 117:13-14</i>  "The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter." <i>p. 118:15-17</i>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions." <i>p. 127:2-8</i>  "An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of

New Claim	Support in 60/131,278
	assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.” <i>p. 46:32 – p. 47:5</i>

New Claim	Support in 60/130,696
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin e-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin e-alpha is active in directing the proliferation, differentiation and migration of these cell types.” <i>p. 47:27-30</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin e-alpha and/or Neutrokin e-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” <i>p. 117:11-15</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin e-alpha and/or Neutrokin e-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin e-alpha and/or Neutrokin e-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin e-alpha-specific and/or Neutrokin e-alphaSV-specific antibodies.” <i>p. 13:9-14</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin e-alpha and/or Neutrokin e-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin e-alpha and/or Neutrokin e-alphaSV function.” <i>p. 92:20-25</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin e-alpha-specific and/or Neutrokin e-alphaSV-specific antibodies.” <i>p. 13:13-14</i></p> <p>“An agonist is a compound which increases the natural</p>

New Claim	Support in 60/130,696
	<p>biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 125:30-33</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 13:18-19</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 62:29-32</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 133:3-5</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 97:30-36</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p>

New Claim	Support in 60/130,696
	<p>"Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology"</p> <p>p. 98:32-33</p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."</p> <p>p. 112:14-23</p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p>p. 133:3-5</p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies."</p> <p>p. 97:23-25</p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197,	<i>See support for Claim 195 and in addition the following</i>



New Claim	Support in 60/130,696
wherein the antibody is administered to an individual.	<p><i>disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”  <i>p. 117:9-10</i></p> <p>“The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.”  <i>p. 118:11-13</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 125:27-33</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”  <i>p. 46:32 – p. 47:5</i></p>

New Claim	Support in 60/130,412
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.”  <i>p. 47:24-27</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha and/or Neutrokin-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes</p>

New Claim	Support in 60/130,412
<p>           TVTQDCLQLI ADSETPTIQK            GSYTFVPWLL SFKRGSAL EE            KENKILVKET GYFFIYGQVL            YTDKTYAMGH LIQRKKVHVF            GDELSLVTLF RCIQNMPETL            PNNSCYSAGI AKLEEGDELQ            LAIPRENAQI SLDGDVTFFG            ALKLL         </p> <p>wherein B lymphocytes are inhibited.</p>	<p>and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 115:37 – p. 116:3</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 13:9-14</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 91:14-19</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 13:13-14</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 124:16-19</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 13:18-19</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha</p>	<p><i>See support for Claim 195</i></p>

New Claim	Support in 60/130,412
(SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 62:27-30</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 131:27-29</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 96:23-29</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology”  <i>p. 97:25-26</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use “humanized” chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”</p>

New Claim	Support in 60/130,412
	<i>p. 111:4-13</i>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”</p> <p><i>p. 131:27-29</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies.”</p> <p><i>p. 96:16-18</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”</p> <p><i>p. 115:35-36</i></p> <p>“The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.”</p> <p><i>p. 116:37 - p. 117:2</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a</p>

New Claim	Support in 60/130,412
	<p>compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.” p. 124:13-19</p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.” p. 46:29 – p. 47:2</p>

New Claim	Support in 60/127,598
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE EMKLKECVSI LPRKESPSVR SSKDGKLLAA TLLLALLSCC LTVVSFYQVA ALQGDLASLR AELQGHHA EK LPAGAGAPKA GLEEAPAVTA GLKIFEPPAP GEGNSSQNSR NKRAVQGPEE TVTQDCLQLI ADSETPTIQK GSYTFVPWLL SFKRGSALEE KENKILVKET GYFFIYGQVL YTDKTYAMGH LIQRKKVHVF GDELSLVTLF RCIQNMPETL PNNSCYSAGI AKLEEGDELQ LAIPRENAQI SLDGDVTFFG ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.” p. 47:23-26</p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha and/or Neutrokin-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” p. 115:11-15</p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.” p. 13:14-20</p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are</p>

New Claim	Support in 60/127,598
	<p>useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 91:24-29</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 13:18-20</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 123:17-20</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 13:24-25</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 62:29-31</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 130:27-29</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or</p>

New Claim	Support in 60/127,598
	<p>Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 96:37 – p. 97:4</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology”  <i>p. 98:1-2</i></p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use “humanized” chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”  <i>p. 110:30-39</i></p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p><i>See support for Claims 195 and 200</i></p>
<p>202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.</p>	<p><i>See support for Claims 195 and 200</i></p>
<p>203. The method of any one of claims 195-197, wherein the antibody is a F(ab')<sub>2</sub> fragment.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 130:27-29</i></p>
<p>204. The method of any one of claims 195-197,</p>	<p><i>See support for Claim 195 and in addition the following</i></p>

New Claim	Support in 60/127,598
wherein the antibody is a polyclonal antibody.	<p><i>disclosure:</i></p> <p>“...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies.”  <i>p. 96:30-32</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<p><i>See support for Claims 195 and 203</i></p>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”  <i>p. 115:9-10</i></p> <p>“The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.”  <i>p. 116:12-14</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 123:13-20</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”  <i>p. 46:27-38</i></p>



New Claim	Support in 60/126,599
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;"> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-<math>\alpha</math> exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-<math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.”  <i>p. 50:7-10</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 121:11-15</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV antagonist. Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 14:3-9</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV function.”  <i>p. 96:17-22</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific and/or Neutrokin-<math>\alpha</math>SV-specific antibodies.”  <i>p. 14:7-9</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”  <i>p. 128:15-18</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2)</p>

New Claim	Support in 60/126,599
	sequences of Neutrokin- $\alpha$ .” <i>p. 14:13-14</i>
196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin- $\alpha$ (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	<i>See support for Claim 195</i>
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin- $\alpha$ (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	<i>See support for Claim 195</i>
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.” <i>p. 66:6-8</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.” <i>p. 135:34-36</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).” <i>p. 102:1-7</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology” <i>p. 103:6-7</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>

New Claim	Support in 60/126,599
	<p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985)." <i>p. 116:22-31</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen." <i>p. 135:34-36</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies." <i>p. 101:31-33</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above." <i>p. 121:9-10</i></p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically</p>

New Claim	Support in 60/126,599
	acceptable carrier, e.g., as described hereinafter.” p. 122:14-16
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.” p. 128:11-18</p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.” p. 49:10-21</p>

New Claim	Support in 60/124,097
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSALEE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p>	<p>“Like other members of TNF family, Neutrokin-alpha exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-alpha is active in directing the proliferation, differentiation and migration of these cell types.” p. 50:7-10</p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-alpha and/or Neutrokin-alphaSV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.” p. 114:3-7</p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-alpha and/or</p>

New Claim	Support in 60/124,097
<p>wherein B lymphocytes are inhibited.</p>	<p>Neutrokin-alphaSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-alpha and/or Neutrokin-alphaSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 14:1-7</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-alpha and/or Neutrokin-alphaSV function.”  <i>p. 96:19-24</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-alpha-specific and/or Neutrokin-alphaSV-specific antibodies.”  <i>p. 14:5-7</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions.”  <i>p. 121:6-9</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-alpha.”  <i>p. 14:11-12</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically</p>

New Claim	Support in 60/124,097
	<p>to a polypeptide of the invention.”  <i>p. 66:6-8</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 128:23-25</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 102:3-9</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology”  <i>p. 103:8-9</i></p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”  <i>p. 109:15-24</i></p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p><i>See support for Claims 195 and 200</i></p>
<p>202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.</p>	<p><i>See support for Claims 195 and 200</i></p>

New Claim	Support in 60/124,097
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p><i>p. 128:23-25</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies."</p> <p><i>p. 101:33-35</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<p><i>See support for Claims 195 and 203</i></p>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."</p> <p><i>p. 114:1-2</i></p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter."</p> <p><i>p. 115:6-8</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-alpha and/or Neutrokin-alphaSV polypeptide on cells, such as its interaction with Neutrokin-alpha and/or Neutrokin-alphaSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-alpha and/or Neutrokin-alphaSV or which functions in a manner similar to Neutrokin-alpha and/or Neutrokin-alphaSV while antagonists decrease or eliminate such functions."</p> <p><i>p. 121:2-9</i></p> <p>"An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain</p>

New Claim	Support in 60/124,097
	<p>cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”</p> <p><i>p. 49:10-21</i></p>

New Claim	Support in 60/122,388
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;"> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHAEK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-a exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-a is active in directing the proliferation, differentiation and migration of these cell types.”</p> <p><i>p. 48:18-21</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”</p> <p><i>p. 113:32-36</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-a and/or Neutrokin-aSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-a and/or Neutrokin-aSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-a-specific and/or Neutrokin-aSV-specific antibodies.”</p> <p><i>p. 14:10-16</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV function.”</p> <p><i>p. 95:31-36</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-a-specific and/or Neutrokin-aSV-specific antibodies.”</p>



New Claim	Support in 60/122,388
	<p><i>p. 14:14-16</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”</p> <p><i>p. 120:9-13</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-a.”</p> <p><i>p. 14:21-22</i></p>
196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.	<i>See support for Claim 195</i>
197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	<i>See support for Claim 195</i>
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”</p> <p><i>p. 64:25-28</i></p> <p>“The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”</p> <p><i>p. 127:32-35</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ). ”</p> <p><i>p. 101:19-25</i></p>
199. The method of any one of claims 195-197,	<i>See support for Claim 195 and in addition the following</i>

New Claim	Support in 60/122,388
wherein the antibody is recombinantly produced.	<p><i>disclosure:</i></p> <p>"Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology"  <i>p. 102:24-25</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)."  <i>p. 108:38 – p. 109:9</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."  <i>p. 127:32-35</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies."  <i>p. 101:12-15</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>

New Claim	Support in 60/122,388
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”  <i>p. 113:30-31</i></p> <p>“The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter.”  <i>p. 114:35-37</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV polypeptide on cells, such as its interaction with Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV while antagonists decrease or eliminate such functions.”  <i>p. 120:6-13</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”  <i>p. 47:21-33</i></p>

New Claim	Support in 09/255,794
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP</p>	<p>“Like other members of TNF family, Neutrokin-a exhibits activity on leukocytes including, for example, monocytes, lymphocytes (e.g., B cells) and neutrophils. For this reason Neutrokin-a is active in directing the proliferation, differentiation and migration of these cell types.”  <i>p. 48:18-21</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV the chemotaxis and activation of macrophages and their</p>

New Claim	Support in 09/255,794
<p> GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 114:14-18</i></p> <p>“A still further embodiment of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-a and/or Neutrokin-aSV activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-a and/or Neutrokin-aSV antagonist. Preferred antagonists for use in the present invention are Neutrokin-a-specific and/or Neutrokin-aSV-specific antibodies.”  <i>p. 14:12-18</i></p> <p>“Additionally, as described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV polypeptide expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV function.”  <i>p. 95:31-36</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-a-specific and/or Neutrokin-aSV-specific antibodies.”  <i>p. 14:16-18</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV while antagonists decrease or eliminate such functions.”  <i>p. 119:5-9</i></p> <p>“<b>Figures 1A and 1B</b> shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of Neutrokin-a.”  <i>p. 14:23-24</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha</p>	<p><i>See support for Claim 195</i></p>

New Claim	Support in 09/255,794
(SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.	
198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 64:25-28</i></p> <p>“The term “antibody” (Ab) or “monoclonal antibody” (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen.”  <i>p. 126:38 – 127:3</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 101:19-25</i></p>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, antibodies of the present invention can be produced through the application of recombinant DNA technology”  <i>p. 102:24-25</i></p>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV polypeptide for diagnosis in humans, it may be preferable to use “humanized” chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”</p>

New Claim	Support in 09/255,794
	<i>p. 109:10-20</i>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The term "antibody" (Ab) or "monoclonal antibody" (mAb) as used herein is meant to include intact molecules as well as fragments thereof (such as, for example, Fab and F(ab') fragments) which are capable of binding an antigen."</p> <p><i>p. 126:38 – 127:3</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"...cells expressing the Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV polypeptide or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies."</p> <p><i>p. 101:12-15</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."</p> <p><i>p. 114:12-13</i></p> <p>"The antagonists and antagonists of the instant may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described hereinafter."</p> <p><i>p. 115:16-18</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV polypeptide on cells, such as its interaction with Neutrokin-<math>\alpha</math> and/or Neutrokin-aSV binding molecules such as receptor molecules. An agonist is a compound</p>

New Claim	Support in 09/255,794
	<p>which increases the natural biological functions of Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV or which functions in a manner similar to Neutrokin-<math>\alpha</math> and/or Neutrokin-<math>\alpha</math>SV while antagonists decrease or eliminate such functions.”</p> <p><i>p. 119:2-9</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”</p> <p><i>p. 47:21-33</i></p>

New Claim	Support in 09/005,874
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL</p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin-<math>\alpha</math> exhibits activity on leukocytes including for example monocytes, lymphocytes and neutrophils. For this reason Neutrokin-<math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.”</p> <p><i>p. 27:10-13</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin-<math>\alpha</math> the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”</p> <p><i>p. 60:20-24</i></p> <p>“A still further aspect of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin-<math>\alpha</math> activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin-<math>\alpha</math> antagonist. Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific antibodies.”</p> <p><i>p. 14:6-11</i></p> <p>“As described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin-<math>\alpha</math> protein expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin-<math>\alpha</math> protein</p>

New Claim	Support in 09/005,874
	<p>function.”  <i>p. 42:14-18</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin-<math>\alpha</math>-specific antibodies.”  <i>p. 14:9-11</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> or which functions in a manner similar to Neutrokin while antagonists decrease or eliminate such functions.”  <i>p. 58:7-9</i></p> <p>“FIG. 1 shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of the Neutrokin-<math>\alpha</math> protein.”  <i>p. 14:13-14</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 43:17-19</i></p> <p>“As used herein, the term "antibody" (Ab) or "monoclonal antibody" (Mab) is meant to include intact molecules as well as antibody fragments (such as, for example, Fab and F(ab')<sub>2</sub> fragments) which are capable of specifically binding to Neutrokin-<math>\alpha</math> protein.”  <i>p. 49:27 – p. 50:2</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin-<math>\alpha</math> protein binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>,</p>



New Claim	Support in 09/005,874
	Elsevier, N.Y., (1981) pp. 563-681 )." <i>p. 50:14-20</i>
199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "Alternatively, Neutrokin- $\alpha$ protein-binding fragments can be produced through the application of recombinant DNA technology" <i>p. 51:26-28</i>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin- $\alpha$ protein for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985)." <i>p. 52:1-10</i>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "As used herein, the term "antibody" (Ab) or "monoclonal antibody" (Mab) is meant to include intact molecules as well as antibody fragments (such as, for example, Fab and F(ab') <sub>2</sub> fragments) which are capable of specifically binding to Neutrokin- $\alpha$ protein." <i>p. 49:27 – p. 50:2</i>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<i>See support for Claim 195 and in addition the following disclosure:</i>  "...cells expressing the Neutrokin- $\alpha$ protein or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies." <i>p. 50:7-9</i>

New Claim	Support in 09/005,874
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above."  <i>p. 60:18-19</i></p> <p>"The antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as hereinafter described."  <i>p. 62:3-5</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>"The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin-<math>\alpha</math> on cells, such as its interaction with Neutrokin-<math>\alpha</math> binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin-<math>\alpha</math> or which functions in a manner similar to Neutrokin while antagonists decrease or eliminate such functions."  <i>p. 58:4-9</i></p> <p>"An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases."  <i>p. 26:14-27</i></p>

New Claim	Support in 60/036,100
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p>MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP</p>	<p>"Like other members of TNF family, Neutrokin <math>\alpha</math> exhibits activity on leukocytes including for example monocytes, lymphocytes and neutrophils. For this reason Neutrokin <math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types."  <i>p. 25:19-22</i></p> <p>"The antagonists may be employed for instance to inhibit Neutrokin <math>\alpha</math> the chemotaxis and activation of macrophages and their precursors, and of neutrophils,</p>

New Claim	Support in 60/036,100
<p> GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSAL EE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”  <i>p. 57:13-17</i></p> <p>“A still further aspect of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin <math>\alpha</math> activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin <math>\alpha</math> antagonist. Preferred antagonists for use in the present invention are Neutrokin <math>\alpha</math>-specific antibodies.”  <i>p. 13:13-18</i></p> <p>“As described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin <math>\alpha</math> protein expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin <math>\alpha</math> protein function.”  <i>p. 39:13-17</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin <math>\alpha</math>-specific antibodies.”  <i>p. 13:16-18</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin <math>\alpha</math> or which functions in a manner similar to Neutrokin while antagonists decrease or eliminate such functions.”  <i>p. 54:27 – p. 55:2</i></p> <p>“FIG. 1 shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of the Neutrokin <math>\alpha</math> protein.”  <i>p. 13:20-21</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-alpha (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197,</p>	<p><i>See support for Claim 195 and in addition the following</i></p>

New Claim	Support in 60/036,100
<p>wherein the antibody is a monoclonal antibody.</p>	<p><i>disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 40:15-17</i></p> <p>“As used herein, the term "antibody" (Ab) or "monoclonal antibody" (Mab) is meant to include intact molecules as well as antibody fragments (such as, for example, Fab and F(ab')<sub>2</sub> fragments) which are capable of specifically binding to Neutrokin α protein.”  <i>p. 46:23-26</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin α protein binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 47:9-15</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, Neutrokin α protein-binding fragments can be produced through the application of recombinant DNA technology”  <i>p. 48:21-23</i></p>
<p>200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin α protein for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi <i>et al.</i>, <i>BioTechniques</i> 4:214 (1986); Cabilly <i>et al.</i>, U.S. Patent No. 4,816,567; Taniguchi <i>et al.</i>, EP 171496; Morrison <i>et al.</i>, EP 173494; Neuberger <i>et al.</i>, WO 8601533; Robinson <i>et al.</i>, WO 8702671; Boulianne <i>et al.</i>, <i>Nature</i> 312:643 (1984); Neuberger <i>et al.</i>, <i>Nature</i> 314:268 (1985).”  <i>p. 48:24 – p. 49:4</i></p>
<p>201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.</p>	<p><i>See support for Claims 195 and 200</i></p>

New Claim	Support in 60/036,100
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“As used herein, the term "antibody" (Ab) or "monoclonal antibody" (Mab) is meant to include intact molecules as well as antibody fragments (such as, for example, Fab and F(ab')<sub>2</sub> fragments) which are capable of specifically binding to Neutrokin α protein.”  <i>p. 46:23-26</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“...cells expressing the Neutrokin α protein or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies.”  <i>p. 47:2-4</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”  <i>p. 57:11-12</i></p> <p>“The antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as hereinafter described.”  <i>p. 58:24-26</i></p>
207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin α on cells, such as its interaction with Neutrokin α binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin α or which functions in a manner similar to Neutrokin while antagonists decrease or eliminate such functions.”  <i>p. 54:24 – p. 55:2</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain</p>

New Claim	Support in 60/036,100
	<p>cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death....Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”</p> <p><i>p. 24:23 – 25:7</i></p>

New Claim	Support in PCT/US96/17957
<p>195. A method of inhibiting B lymphocytes comprising administering an effective amount of an antibody that binds a protein whose amino acid sequence is:</p> <p style="margin-left: 40px;"> MDDSTEREQS RLTSCLKKRE  EMKLKECVSI LPRKESPSVR  SSKDGKLLAA TLLLALLSCC  LTVVSFYQVA ALQGDLASLR  AELQGHHA EK LPAGAGAPKA  GLEEAPAVTA GLKIFEPPAP  GEGNSSQNSR NKRAVQGPEE  TVTQDCLQLI ADSETPTIQK  GSYTFVPWLL SFKRGSALEE  KENKILVKET GYFFIYGQVL  YTDKTYAMGH LIQRKKVHVF  GDELSLVTLF RCIQNMPETL  PNNSCYSAGI AKLEEGDELQ  LAIPRENAQI SLDGDVTFFG  ALKLL </p> <p>wherein B lymphocytes are inhibited.</p>	<p>“Like other members of TNF family, Neutrokin <math>\alpha</math> exhibits activity on leukocytes including for example monocytes, lymphocytes and neutrophils. For this reason Neutrokin <math>\alpha</math> is active in directing the proliferation, differentiation and migration of these cell types.”</p> <p><i>p. 25:7-10</i></p> <p>“The antagonists may be employed for instance to inhibit Neutrokin <math>\alpha</math> the chemotaxis and activation of macrophages and their precursors, and of neutrophils, basophils, B lymphocytes and some T-cell subsets, e.g., activated and CD8 cytotoxic T cells and natural killer cells, in certain auto-immune and chronic inflammatory and infective diseases.”</p> <p><i>p. 56:15-17</i></p> <p>“A still further aspect of the invention is related to a method for treating an individual in need of a decreased level of Neutrokin <math>\alpha</math> activity in the body comprising, administering to such an individual a composition comprising a therapeutically effective amount of an Neutrokin <math>\alpha</math> antagonist. Preferred antagonists for use in the present invention are Neutrokin <math>\alpha</math>-specific antibodies.”</p> <p><i>p. 13:8-13</i></p> <p>“As described in detail below, the polypeptides of the present invention can also be used to raise polyclonal and monoclonal antibodies, which are useful in assays for detecting Neutrokin <math>\alpha</math> protein expression as described below or as agonists and antagonists capable of enhancing or inhibiting Neutrokin <math>\alpha</math> protein function.”</p> <p><i>p. 38:28 - p. 39:2</i></p> <p>“Preferred antagonists for use in the present invention are Neutrokin <math>\alpha</math>-specific antibodies.”</p> <p><i>p. 13:11-13</i></p> <p>“An agonist is a compound which increases the natural biological functions of Neutrokin <math>\alpha</math> or which functions</p>

New Claim	Support in PCT/US96/17957
	<p>in a manner similar to Neutrokin while antagonists decrease or eliminate such functions.”  <i>p. 54:5-7</i></p> <p>“FIG. 1 shows the nucleotide (SEQ ID NO:1) and deduced amino acid (SEQ ID NO:2) sequences of the Neutrokin <math>\alpha</math> protein.”  <i>p. 13:15-16</i></p>
<p>196. A method of inhibiting B lymphocyte proliferation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte proliferation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>197. A method of inhibiting B lymphocyte differentiation comprising administering an effective amount of an antibody that binds Neutrokin-<math>\alpha</math> (SEQ ID NO:2), wherein B lymphocyte differentiation is inhibited.</p>	<p><i>See support for Claim 195</i></p>
<p>198. The method of any one of claims 195-197, wherein the antibody is a monoclonal antibody.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Antigenic epitope-bearing peptides and polypeptides of the invention are therefore useful to raise antibodies, including monoclonal antibodies, that bind specifically to a polypeptide of the invention.”  <i>p. 39:29-40:1</i></p> <p>“As used herein, the term “antibody” (Ab) or “monoclonal antibody” (Mab) is meant to include intact molecules as well as antibody fragments (such as, for example, Fab and F(ab')<sub>2</sub> fragments) which are capable of specifically binding to Neutrokin <math>\alpha</math> protein.”  <i>p. 46:3-6</i></p> <p>“In the most preferred method, the antibodies of the present invention are monoclonal antibodies (or Neutrokin <math>\alpha</math> protein binding fragments thereof). Such monoclonal antibodies can be prepared using hybridoma technology. (Köhler <i>et al.</i>, <i>Nature</i> 256:495 (1975); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:511 (1976); Köhler <i>et al.</i>, <i>Eur. J. Immunol.</i> 6:292 (1976); Hammerling <i>et al.</i>, in: <i>Monoclonal Antibodies and T-Cell Hybridomas</i>, Elsevier, N.Y., (1981) pp. 563-681 ).”  <i>p. 46:18-24</i></p>
<p>199. The method of any one of claims 195-197, wherein the antibody is recombinantly produced.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Alternatively, Neutrokin <math>\alpha</math> protein-binding fragments can be produced through the application of recombinant DNA technology”</p>

New Claim	Support in PCT/US96/17957
	<i>p. 47:29-48:2</i>
200. The method of any one of claims 195-197, wherein the antibody is a chimeric antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“Where <i>in vivo</i> imaging is used to detect enhanced levels of Neutrokin <math>\alpha</math> protein for diagnosis in humans, it may be preferable to use "humanized" chimeric monoclonal antibodies....Methods for producing chimeric antibodies are known in the art. See, for review, Morrison, <i>Science</i> 229:1202 (1985); Oi et al., <i>BioTechniques</i> 4:214 (1986); Cabilly et al., U.S. Patent No. 4,816,567; Taniguchi et al., EP 171496; Morrison et al., EP 173494; Neuberger et al., WO 8601533; Robinson et al., WO 8702671; Boulianne et al., <i>Nature</i> 312:643 (1984); Neuberger et al., <i>Nature</i> 314:268 (1985).”</p> <p><i>p. 48:3-12</i></p>
201. The method of any one of claims 195-197, wherein the antibody is a humanized antibody.	<i>See support for Claims 195 and 200</i>
202. The method of any one of claims 195-197, wherein the antibody comprises human constant domains.	<i>See support for Claims 195 and 200</i>
203. The method of any one of claims 195-197, wherein the antibody is a F(ab') <sub>2</sub> fragment.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“As used herein, the term "antibody" (Ab) or "monoclonal antibody" (Mab) is meant to include intact molecules as well as antibody fragments (such as, for example, Fab and F(ab')<sub>2</sub> fragments) which are capable of specifically binding to Neutrokin <math>\alpha</math> protein.”</p> <p><i>p. 46:3-6</i></p>
204. The method of any one of claims 195-197, wherein the antibody is a polyclonal antibody.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“...cells expressing the Neutrokin <math>\alpha</math> protein or an antigenic fragment thereof can be administered to an animal in order to induce the production of sera containing polyclonal antibodies.”</p> <p><i>p. 46:11-13</i></p>
205. The method of any one of claims 195-197, wherein the antibody is a Fab fragment.	<i>See support for Claims 195 and 203</i>
206. The method of any one of claims 195-197, wherein the antibody is administered to an individual.	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The agonists and antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as described above.”</p>



New Claim	Support in PCT/US96/17957
	<p><i>p. 56:13-14</i></p> <p>“The antagonists may be employed in a composition with a pharmaceutically acceptable carrier, e.g., as hereinafter described.”</p> <p><i>p. 57:26-28</i></p>
<p>207. The method of any one of claims 195-197, wherein the antibody is administered to a cell culture.</p>	<p><i>See support for Claim 195 and in addition the following disclosure:</i></p> <p>“The invention also provides a method of screening compounds to identify those which enhance or block the action of Neutrokin <math>\alpha</math> on cells, such as its interaction with Neutrokin <math>\alpha</math> binding molecules such as receptor molecules. An agonist is a compound which increases the natural biological functions of Neutrokin <math>\alpha</math> or which functions in a manner similar to Neutrokin while antagonists decrease or eliminate such functions.”</p> <p><i>p. 54:2-7</i></p> <p>“An <i>in vitro</i> cell proliferation, cytotoxicity and cell death assay for measuring the effect of a protein on certain cells can be performed by using reagents well known and commonly available in the art for detecting cell replication and/or death.... Such cell proliferation modulation activities as can be measure in this type of assay are useful for treating tumor, tumor metastasis, infections, autoimmune diseases inflammation and other immune-related diseases.”</p> <p><i>p. 24:12-25</i></p>